

### Abstract

A hydro-power generation system for use in conjunction with a water treatment system is disclosed. The embodiments of the hydro-power generation system include an impeller rotatably positioned in a housing. The impeller is rotatably coupled with a generator. When water flows through the water treatment system, water flows to the hydro-power generation system and acts on the impeller causing rotation thereof. The rotation of the impeller results in the generation of electricity for the water treatment system by the generator. Other embodiments of the hydro-power generation system include a rotor rotatably positioned in a conduit through which water flows. The flowing water causes the rotor to rotate. The rotor operatively cooperates with a surrounding stator. As the rotor rotates within the stator electricity is generated for the water treatment system.